

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

OCT 1 1 2018

REPLY TO THE ATTENTION OF

WC-15J

#### <u>CERTIFIED MAIL</u> 7016 3560 0000 4829 7637 <u>RETURN RECEIPT REQUESTED</u>

Mr. Jim O' Keefe President Elite Manufacturing Technologies 333 Munroe Dr. Bloomingdale IL 60108

Subject: August 28, 2018 Pretreatment Compliance Evaluation Inspection

Dear Mr. O' Keefe:

Please find enclosed a copy of the U.S. Environmental Protection Agency Inspection Report for the Pretreatment Compliance Evaluation inspection conducted at Elite Manufacturing Technologies in Bloomingdale, IL on August 28, 2018. The purpose of the inspection was to evaluate and document compliance of Elite Manufacturing Technologies with the Clean Water Act.

During the inspection, EPA identified several areas of concern; these are listed in the enclosed report. Note also that the State of Illinois has a partial authorization of the National Pollutant Discharge Elimination System Program; however, it does not include an approved State Pretreatment Program. Therefore, EPA is the Control Authority and Approval Authority for those Industrial Users within the state that discharge to a Publicly Owned Treatment Works without an approved pretreatment program, including your facility. Elite Manufacturing Technologies must therefore promptly notify EPA in advance of any substantial change in the volume or character of pollutants in its discharge, as required by 40 C.F.R. §403.12(j).

Please provide a written response to the areas of concern identified in the report within 30 days of receipt of this letter. In your response, please include a description of actions taken to correct any issues documented in the inspection report. Your response should be submitted electronically to <a href="mailto:valdes.carla@epa.gov">valdes.carla@epa.gov</a>. Where it is infeasible to submit electronically, you may mail the information to:

Carla Valdes, Environmental Scientist U.S. EPA Region 5 Water Division, WC-15J 77 W. Jackson Blvd. Chicago, Illinois 60604-3590 If you have any questions, please contact Carla Valdes of my staff at (312) 353-0724 or via email at <u>valdes.carla@epa.gov</u>.

Sincerely,

Michelle Heger, Chief

Section 1

Water Enforcement and Compliance Assurance

Branch

Enclosure

## CWA COMPLIANCE EVALUATION INSPECTION REPORT U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5

Compliance Evaluation Inspection

Purpose:

Facility:	Elite Manufac 333 Munroe S Bloomingdale	
Date of Inspection: August 28, 2018		
EPA Representatives:		Carla Valdes, Environmental Scientist, 312-353-0724 John Jurevis, Environmental Engineer, 312-886-1446
Facility Representatives:		David Creaser, Facility Manager, 630-675-8362 Jim O'Keefe, President, 630-675-7752
Report Prepared by:		Carla Valdes, Environmental Scientist Water Enforcement and Compliance Assurance, Section 1 valdes.carla@epa.gov
Report Prepared by: Carla Valdes, Environmental Scientist  Inspector Signature:		
Report Date: 10/4/2018		
Approver Name and Title: Michelle Heger, Chief, Section 1, Water Enforcement and Compliance Assurance Branch		
Approver Signature: Mich A		
Approval Date: 10/11/18		

#### Purpose of Inspection:

The purpose of this inspection was to verify Elite Manufacturing Technologies' (Elite) status and compliance with Pretreatment requirements under the Clean Water Act (CWA).

#### Background:

Per an industrial survey provided by the Village of Bloomingdale, Elite is a sheet metal fabricator in Bloomingdale, Illinois. The facility currently has between 150 to 200 employees, and operates with two 8 to 10-hour shifts per day. The shop operates Monday through Friday, and occasional Saturdays.

#### Inspection:

#### Opening Meeting and Discussion

EPA representatives (we) arrived outside of Elite Manufacturing Technologies at 9:45 a.m. We entered the facility and presented our credentials at 10:01 a.m. to Dave Cresser, the facilities manager. EPA representatives notified Mr. Cresser of our procedures for confidential business information (CBI), and he said they did not have any CBI concerns. We then explained that during the inspection we would discuss Elite's operations, tour their production floor, associated wastewater generation, and review necessary documents. We requested copies of the facility's process flow diagram, floor plan, and any results from wastewater sampling. Mr. Cresser stated he did not have any of the requested documents.

Mr. Cresser gave some background and a brief overview of the grinding, milling, welding, iron phosphating, and powder coating operations. He also stated that Elite produces various parts for medical, telecom, signage, and gaming devices (mainly slot machines). Elite does not have a regular weekly shutdown period. The facility was built in 1999, and the powder coating operation line was installed in 2000.

Mr. Cresser stated that the grinding, milling, and welding processes at the facility do not generate wastewater, however the milling machines do require coolant. He identified that the iron phosphating line generates wastewater at the facility. He also explained that while Elite itself does not take samples of the wastewater discharge to the sewer, the Village of Bloomingdale takes samples from the manhole outside of their facility to confirm that Elite is in compliance with the Village's sewer use ordinance. Mr. Cresser stated that there have been no substantial changes to the manufacturing process since the facility opened. Mr. Cresser provided an overview of the facility's processes as follows:

#### Process Description:

Elite uses various metals (aluminum, cold-rolled steel, galvanized steel, copper, and brass) as the raw material in their production process. This metal is generally shipped as sheet metal, with some as bar stock. This metal is then either laser cut or punched, and then the cut metal is welded during assembly.

Parts are then sent to the grinding department, where the welds and surfaces are smoothed. The parts are sent through an abrasive sanding system or through milling processes in this area. Air from the grinding process area is filtered through standalone wet-dust collectors. A separate room contains another grinding area with a larger dust collection system. The dust collection

system has three booths with recirculating air. From grinding, the parts go to the forming area or to the spotwelding areas, or both.

After parts are assembled, some parts are sent to the paint shop. The parts in the paint area begin by being hung on a line and sent through a part washer spray system with an iron phosphating solution followed by two rinses. Parts are then sent through a hot-air dryer. Following the dryer, the parts are sent through the powder coating enclosure. After being sprayed with the coating, the parts are inspected and touched up, and then they are baked to set the paint.

#### Facility Tour:

We began the facility tour at 10:20 a.m. in the receiving dock and raw material storage area. Mr. Cresser lead us to the grinding department next, where he pointed us to the stand-alone wet dust collectors on the production floor. The air in the grinding area is filtered through running water in the dust collectors. These wet-dust collectors have a capacity of around 100 gallons, and they are drained to directly to the sewer. Mr. Cresser stated that he did not know how often these wet-dust collectors are drained to the sewer. The grinding department also contains a larger dust-collection system with three booths for workers in closer contact with the parts during the grinding process. Mr. Cresser stated that each booth uses 200 gallons of water to remove dust from the air, and the water from each dust collector is drained to the sewer twice per year. Neither discharge from the free-standing wet-dust collector units nor the dust-collection booths are sampled prior to discharge.

From the grinding department, Mr. Cresser lead us to the air condenser room where water is cooled for the welding processes. The air condenser room has an oil-water separator that removes the trace oil left in the condensate. Mr. Cresser stated that the separated condensate is released to the sewer through the floor. The oil-water separator is serviced once per year, where the filters and oil-absorbing sock is replaced. Elite does not take samples of the condensate discharge.

Mr. Cresser then lead us to the boiler outside of the paint line room, where process water for the paint line is heated, and then pointed to the approximate location of the pipes leading toward the iron phosphating process. The heated water from the boiler is piped to the first of three 900-gallon tanks of the part washer system. The first tank of the part washer system contains heated water and iron phosphating agent (GF PHOS 427), and the second two tanks are rinse tanks. Iron phosphating solution recirculates through boiler to parts sprayer and back to the tank. Water loss from the iron phosphating tank is through drag-out and evaporation, and the water lost is replaced with city water.

City water is pumped into the third tank, and then overflows into the second tank, which in turn flows into the sewer at a rate of two gallons per minute. Elite also adds an anti-foaming agent to the rinse water (GF ADD 610). This anti-foaming agent is added to the rinse water at a rate of six ounces per day. Both the iron phosphating agent and the additive for the rinse process are stored in drums. The iron phosphating agent drum has sufficient secondary containment, but the rinse additive did not. Mr. Cresser stated that the iron phosphating tank is released to the sewer two or three times per year, and that the rinse tanks are released to the sewer along with the iron phosphating tanks. After conferring with his colleague, Mr. Cresser stated that the pH of the iron

phosphating tank is maintained between 6 and 8, and the pH of the tank is checked four times per day with an electronic pH meter. Neither discharge from the iron phosphating tank nor the rinse water is sampled.

There is a trench drain around the room with the iron phosphating and powder coating process. The trench drain connects directly to the sewer. The trench drain collects potential overflow from the iron phosphating process.

Following viewing the phosphating process, Mr. Cresser then showed us the powder coating process. The powder coating process takes place in a self-contained, self-cleaning environment. The process uses two types of air filters—both HEPA and a torit cyclone duct collection system. The powder coating paint line process itself does not use water or generate wastewater After viewing the powder coating process, Mr. Cresser directed us along the approximate location of the drain connection to the sewer system, and then showed us the location of the manhole where the Village takes samples of the facility's discharge.

#### **Closing Meeting**

We entered the conference room for the internal conference at 11:10 a.m., and Mr. Cresser and Jim O' Keefe, President, joined us at 11:30 a.m. for the closing conference. We thanked the Elite Manufacturing technologies representatives for cooperating with the inspection team and for the information secured through the facility tour.

During the closing meeting, we brought up the following areas of concern:

- Elite did not submit a baseline report prior to beginning production and wastewater generation at their current location.
- Elite has not been submitting semi-annual reports to EPA.
- Elite has not been collecting samples of their discharge, such as that from their iron phosphating process, condensate from the air condenser, and the wet-dust collection units.

We informed Elite representatives that there could be areas of concern noted in the report following file review. Elite did not claim any information received or photos taken during the inspection as confidential business information. We provided Elite representatives the small business information sheet and information regarding the federal pretreatment regulations. We left the facility at approximately 12:15 p.m.

#### Appendicies:

1. Photo Log

### Appendix 1: Photo Log

# Elite Manufacturing EPA Inspection August 28, 2018 All photos taken by John Jurevis, Environmental Engineer, U.S. EPA Camera: Ricoh WG-4



1: RIMG0202

Description: Wet dust collector on plant floor Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: North

Date/Time: August 28, 2018 / 10:27 a.m.



Description: Wet dust collector booth

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Southwest

Date/Time: August 28, 2018 / 10:34 a.m.



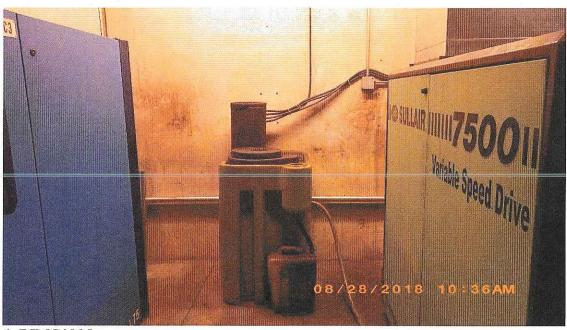
3: RIMG0204

Description: Wet dust collector booth

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Southwest

Date/Time: August 28, 2018 / 10:34 a.m.

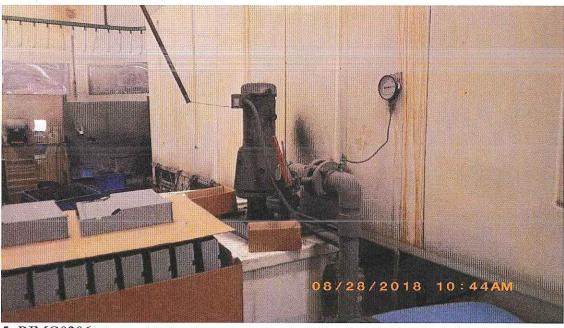


Description: Oil water separator for air compressor condensate

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Southwest

Date/Time: August 28, 2018 / 10:36 a.m.



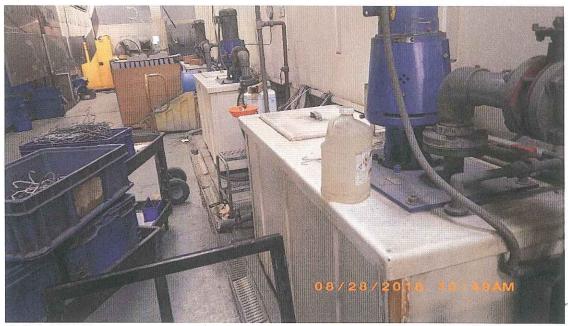
5: RIMG0206

Description: First tank in paint rinse line, containing phosphate

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Northeast

Date/Time: August 28, 2018 / 10:44 a.m.



Description: All 3 tanks in the paint rinse line, with tank 3 closest to camera

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Northeast

Date/Time: August 28, 2018 / 10:49 a.m.



7: RIMG0208

Description: Floor trench in powder painting room Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Downward

Date/Time: August 28, 2018 / 10:53 a.m.

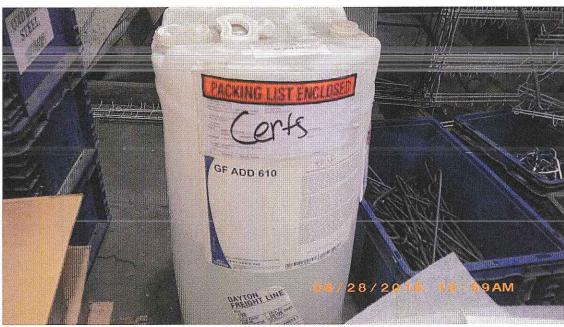


Description: Drum of GF PHOS 427 used in the first tank of the paint rinse line

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: Northeast

Date/Time: August 28, 2018 / 10:57 a.m.



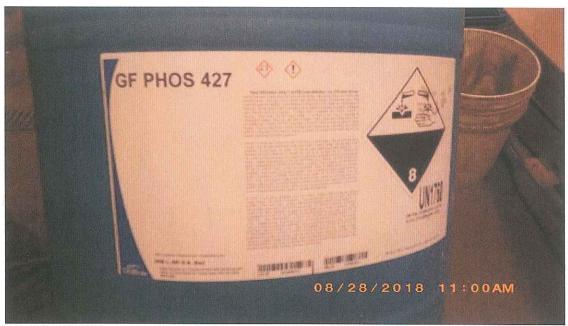
9: RIMG0210

Description: Drum of GF ADD 610 used in the paint rinse line

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: East

Date/Time: August 28, 2018 / 10:59 a.m.



Description: Empty drum of GF PHOS 427

Location: Elite Manufacturing in Bloomingdale, IL

Camera Direction: East

Date/Time: August 28, 2018 / 11:00 a.m.